

Curriculum Vitae

Name/Family name	Astrid Morreale
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Nationality & citizenship	USA.

DEGREES

University of California at Riverside

2006 Doctoral Candidate, Nuclear Spin Physics
Expected degree conferral date: May 2009

Ph.D Thesis Topic: "Accessing the Sign and Magnitude of the Gluon's Polarization with Charged Pions at the PHENIX Detector"

University of California at Riverside

2006 Master of Science, Nuclear Physics.

University of California at Los Angeles

2004 Bachelor of Science, Physics.

FELLOWSHIPS AND SCHOOLS

University of California's President

2009 Dissertation Year Fellow

ECT*(European Center for Theoretical Studies in Nuclear Physics and Related Areas) Trento, Italy

2006 RBRC Fellowship QCD Spin Physics Doctoral Programme,

Kyoto, Japan

2006 Fellowship Spin2006 Symposium

Brookhaven National Laboratory

2005 2nd Summer School on QCD Spin Physics.

Brookhaven National Laboratory

2004 1st Summer School on QCD Spin Physics.

University of California at Riverside

2004 Fellowship Department of Physics

AWARDS

University of California

2008 UC President's Dissertation Year Fellowship Award

University of California at Riverside

2008 High Energy Research/Heavy Ion Research, Benjamin C. Shen Memorial Award.

RHIC and AGS Users Executive Council

2008 Recognition for advocacy of Students and Post-doctoral scholars at Brookhaven National Laboratory.

University of California at Los Angeles

2004 Staff Achievement Award for contributions as a Medium Energy group Laboratory staff

RESEARCH EXPERIENCE

September 2004-Current: Graduate Student Researcher (GSR), University of California at Riverside.

Spin Structure studies on Polarized proton proton collisions via inclusive charged Pion production. PHENIX EMCal response to charged hadron studies and parameterizations. Beam Shift offline calibrations. Online and offline trigger Monitoring and threshold studies. Detector and data monitoring, online calibrations. Pythia Simulations.

2002-2004: Undergraduate Student, Lab assistant I, University of California Los Angeles. Electro Magnetic Calorimeter's PMT Testing and Characterization, Construction/testing of STAR's Forward Pion Detector's PMT-Lead glass assemblies, studies of silicon dead layer measurements.

Associated Professional Experience

Programming languages: C++, FORTRAN, ROOT, PAW etc.

Operating systems : Linux, Windows

Typesetting: LateX, open office, power point.

Other: Electronics Technician expertise: Helicopter aviation electronics. (7+ years experience)

Languages:

- English
- Italian
- Spanish
- French
- Portuguese(Good reading only)

OTHER PROFESSIONAL ACTIVITIES

2008 Principal Organizer, “Diversity in Physics” , RHIC-AGS Users’ Meeting, BNL, May 2008.

2008 Graduate Student Panel member, Conference for Undergraduate Women in Physics at Yale.

2007-2008 PHENIX *Focus* Seminars Principal Organizer.

2007-2008 Elected Post Doctoral Scholar/Graduate student Representative for the RHIC and AGS User's Executive Council (UEC)

2006-2007 Elected Vice President of Brookhaven National Laboratory's Association of Graduate Students/Post Doctoral Scholars (ASAP)

PRESENTATIONS

1.”Accessing the Sign and Magnitude of Δg by Measuring the Double Longitudinal Pion Production in Polarized p+p Collisions at PHENIX”. The 18th International Spin Physics Symposium, VA, USA.

2.Searching for the Proton's Spin: Accessing the Gluon's Polarization with Polarized p+p Collisions via Pion Production” (**Invited**). RHIC and AGS Collider Accelerator Department Seminar.

3. 2008 “Recent PHENIX Spin Results “(**Invited**). Winter Workshop of Nuclear Dynamics, South Padre Island, USA.

4. 2008 “ $\pi^\pm A_{LL}$ and Cross Section Studies in PHENIX central arms” (**Invited**), Los Alamos National Laboratory. New Mexico, USA

5.2006 “Accessing the Gluon Polarization A_{LL} through in Charged Pion Production.” The 17th International Spin Physics Symposium, Kyoto, Japan.

6.2006 “Accessing Δg through the Double-Helicity Asymmetry in Charged Pion Production at PHENIX.” RHIC Collaboration Meeting, Saitama, Japan

7.2006 “RHIC's Central Rapidity Charged Pion A_{LL} Measurements.” European Center for theoretical studies, Trento , Italy.

8.2006 “Charged Pions at PHENIX.” RHIC and AGS users meeting Poster Brookhaven

National Laboratory, NY, USA.

PUBLICATIONS

Text Book Mention.

1. Bass, Steven D. (2008) "The Spin Structure of the Proton", London: World Scientific, 152.

Proceedings and Reports

2. Morreale, A. (2008) "**Recent Spin Results from the PHENIX Detector at RHIC**", Paper presented at the Winter Workshop of Nuclear Dynamics, South Padre, Texas, January 2008

3. Morreale, A (2006) "**Accessing the Gluon Polarization through the Double Longitudinal Spin Asymmetries in Charged Pion Production at PHENIX**" Proceedings of the 17th International Spin Physics Symposium, Kyoto, Japan, September 2006, Kyoto AIP Conf. Proc. 915:359-362, 2007 pp359-362

4. Morreale, A (2008) "**PHENIX's Central Track Beam Shift and Momentum Scale Corrections on Run-06's $\sqrt{s} = 200$ pp Collisions**" To Appear in the RIKEN Accel. Prog. Rep. Vol. 41

5. Morreale, A., Aidala, C., Boyle, K. (2006) "**Accessing the Gluon Polarization through π^\pm ALL at PHENIX**", RIKEN Accel. Prog. Rep. Vol. 40 p78

6. Morreale, A., Barish, K., Emam, W. (2005) "**Charged hadron/pion ALL**", RIKEN Accel. Prog. Rep. Vol. 39.

PHENIX Collaboration Peer Reviewed Journal Publications.

7. A. Adare, et al, "Inclusive cross section and double helicity asymmetry for π^0 production in p+p collisions at $\sqrt{s}=200$ GeV" Apr 2007 Phys.Rev.D76:051106,2007.

8. Adare et. al. "Cold Nuclear Matter Effects on J/Psi as Constrained by Deuteron-Gold Measurements at $\sqrt{s(NN)} = 200$ -GeV. By PHENIX Collaboration, Nov. 2007. Phys.Rev.C77:024912,2008.

9. Adare et al. "Transverse momentum and centrality dependence of dihadron correlations in Au+Au collisions at $\sqrt{s(NN)} = 200$ -GeV: Jet-quenching and the response of partonic matter." May 2007. Phys.Rev.C77:011901,2008.

10. Adare et al. "J/psi Production vs Centrality, Transverse Momentum, and Rapidity in Au+Au Collisions at $\sqrt{s(NN)} = 200$ -GeV. Nov 2006." Phys.Rev.Lett.98:232301,2007.

11 Adare et al. "System Size and Energy Dependence of Jet-Induced Hadron Pair Correlation Shapes in Cu+Cu and Au+Au Collisions at $s(NN)^{1/2} = 200$ and 62.4-GeV." Nov 2006. Phys.Rev.Lett.98:232302,2007.

12.Adare et al. "Energy Loss and Flow of Heavy Quarks in Au+Au Collisions at $s(NN)^{1/2} = 200$ -GeV." Nov 2006. Phys.Rev.Lett.98:172301,2007.

13.Adare et al. "Correlated Production of p and anti-p in Au+Au Collisions at $s(NN)^{1/2} = 200$ -GeV." Nov 2006. Phys.Lett.B649:359-369,2007.

14.Adare et al. "J / psi production versus transverse momentum and rapidity in p+p collisions at $s^{1/2} = 200$ -GeV." Nov 2006.Phys.Rev.Lett.98:232002,2007.

15.Adare et al. "Measurement of high-p(T) single electrons from heavy-flavor decays in p+p collisions at $s^{1/2} = 200$ -GeV." Sep 2006. Phys.Rev.Lett.97:252002,2006.

16.Adare et. al "Scaling properties of azimuthal anisotropy in Au+Au and Cu+Cu collisions at $s(NN) = 200$ -GeV." Aug 2006. Phys.Rev.Lett.98:162301,2007.

PHENIX Collaboration Publications Submitted for Peer Reviewed Journal Publication

17. A. Adare et al."Charged hadron multiplicity fluctuations in Au+Au and Cu+Cu collisions from $\sqrt{s_{NN}} = 22.5$ to 200 GeV." May 2008. 17pp. e-Print: arXiv:0805.1521

18.A. Adare et al "Dilepton mass spectra in p+p collisions at $s^{1/2} = 200$ -GeV and the contribution from open charm.. Feb 2008. 18pp. Submitted to Phys.Rev.Lett. E-Print: arXiv:0802.0050 [hep-ex]

19.A. Adare et al. "Energy dependence of π^0 production in Cu + Cu collisions at $s(NN)^{1/2} = 22.4$ -GeV, 62.4-GeV, and 200-GeV. Jan 2008. 7pp. Submitted to Phys.Rev.Lett. 20.A. Adare et al "Dihadron azimuthal correlations in Au+Au collisions at $s(NN)^{1/2} = 200$ -GeV. Submitted to Phys.Rev.C e-Print: arXiv:0801.4545 [nucl-ex]

21. A. Adare et al "Suppression pattern of neutral pions at high transverse momentum in Au +Au collisions at $s(NN)^{1/2} = 200$ -GeV and constraints on medium transport coefficients." Jan 2008. 6pp. Submitted to Phys.Rev.Lett. e-Print: arXiv:0801.4020 [nucl-ex]

22.A. Adare et al "Quantitative Constraints on the Opacity of Hot Partonic Matter from Semi-Inclusive Single High Transverse Momentum Pion Suppression in Au+Au collisions at $s(NN)^{1/2} = 200$ -GeV.". Jan 2008. 13pp. Submitted to Phys.Rev.C e-Print: arXiv:0801.1665 [nucl-ex]

23. "J/psi Production in $\sqrt{s(NN)} = 200\text{-GeV}$ Cu+Cu Collisions." Jan 2008.
6pp. Submitted to Phys.Rev.Lett. CITATION = ARXIV:0706.4361 e-Print:
arXiv:0801.0220 [nucl-ex]